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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

MEHRPOUR, NAGHMEH

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

05/17/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	09/977,269		SALONAH0 ET AL.	
	Examiner		Art Unit	
	Naghmeh Mehrpour		2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/23/07.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 and 24-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 and 24-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>4/23/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/23/07 has been entered.

Information Disclosure Statement

2. The information disclosure statement filed reference listed in the information Disclosure Submitted on 04/23/07 have been considered by the examiner (see attached PTO-1449

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –
(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical

Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. **Claims 1-13, 15-21, 24-46**, are rejected under 35 U.S.C. 102(e) as being anticipated by Endo III et al. (Patent Number 5,943,610).

Regarding claims 1, 43, 45-46, Endo teaches a method/mobile of controlling the power with which a mobile station transmits to a base station, comprising the step of:

transmitting from the base station to the mobile station a power control command having a given value (col 2 lines 23-55);

receiving said power control command at said mobile station (col 2 lines 23-55);

determining from said received power control command a parameter representative of the quality with which the power control command is received at the mobile station (col 2 lines 55-67, col 3 lines 1-7), and

controlling the power at which the mobile station transmits signals based on the determination step (col 3 lines 7-62).

Regarding claim 2, Endo teaches a method wherein in the determining step, the received value of said received power control command is determined as said parameter (col 3 lines 7-62).

Regarding claim 3, Endo teaches a method as claimed in claim 2, wherein the power control command signal as generated is indicative of a power control command having a given value, and further comprising the steps of comparing said determined received value with a threshold value (col 3 lines 7-62);

determining the given value which was transmitted based on the comparing step (col 7 lines 7-62);

and

in the controlling step controlling the power which the mobile station transmits signals based on the determined transmitted value (col 3 lines 7-62)

Regarding claim 4, Endo teaches a method wherein the mobile station is arranged to transmit signals to plurality of base stations, each of the base stations transmitting a power control commands to the mobile station (col 2 lines 23-67).

Regarding claim 5, Endo teaches a method wherein the method further comprises the step of selecting one of the determined transmitted values in accordance with a predetermined criteria (col 2 lines 23-67).

Regarding claim 6, Endo teaches a method wherein the transmitted power control command comprises one of a mobile value indicating that the power should be increased and a base value indicating the power should be decreased (col 3 lines 7-62).

Regarding claim 7, Endo teaches a method wherein the predetermined criteria is to select value if at least one of the determined transmitted values is the base value (col 3 lines 7-63).

Regarding claim 8, Endo teaches a method wherein the predetermined criteria is to select the mobile value if all the determined transmitted values are the mobile value (col 3 lines 7-62).

Regarding claim 9, Endo teaches a method wherein the threshold value is between the possible received values representative of the transmitted mobile and base values (col 3 lines 7-62).

Regarding claim 10, Endo teaches a method wherein the threshold value is such that one of transmitted power command value is favored over the other (col 3 lines 7-62).

Regarding claim 11, Endo teaches a method wherein the mobile value is favored over the base value (col 2 lines 23-67).

Regarding claim 12, Endo inherently teaches a method wherein the mobile value is +1 and the base value is -1 (col 2 lines 23-67).

Regarding claim 13, Endo inherently teaches a method wherein the threshold value is in the range -0.6 to 0 (col 2 lines 23-67).

Regarding claim 15, Endo teaches a method as claimed in any preceding claim, further comprising the steps of :

receiving at the base station a signal from said mobile station, determining the strength of the received signal from the mobile station and determining from the strength of the received signal the power control command transmitted to the mobile station (col 2 lines 23-67).

Regarding claims 16, 44, Endo teaches a method as claimed in claim 5 or any claim appended thereto, said method comprising the steps of:

combining the received values of said received power control commands (col 3 lines 7-62),

comparing the combined value and the selected value and on the basis of the comparison selecting one of said combined value and the selected value and controlling the power which the mobile station transmits in accordance therewith (col 3 lines 10-67).

Regarding claim 17, Endo teaches a method as claimed in claim 16 when appended to claim 6, wherein the one of the combined value and the selected value which is closer

Art Unit: 2617

to representing a predetermined one of said mobile and base transmitted values is selected (col 3 lines 7-62).

Regarding claim 18, Endo teaches a method as claimed in claim 17, wherein said predetermined one of said values is the base value (col 3 lines 7-62).

Regarding claim 19, Endo teaches a method as claimed in any one of the preceding claims when appended to claim 2, comprising the steps of:

outputting a value based on a currently received power control command value and at least one previously received power control value (col 2 lines 23-67); and

comparing said output value and the selected value and on the basis of the comparison selecting one of said output value and the selected value and controlling the power which the mobile station transmits in accordance therewith (col 2 lines 23-67).

Regarding claim 20, Endo teaches a method as claimed in claim 19, comprising the steps of: summing the currently received power control value with the at least one previously received power control command value (col 2 lines 23-67);

comparing the summed value with a predetermined threshold (col 3 lines 7-62);

outputting the determined received value or if a threshold of the summed value is crossed outputting a default value (col 3 lines 7-62).

Art Unit: 2617

Regarding claim 21, Endo teaches a method as claimed in claim 20, wherein the mobile station is arranged to transmit signals to a plurality of base stations, each of which base stations is arranged to transmit power control commands to said mobile station, said method further comprising the steps of:

determining the values of each of said received power control values and selecting one of said determined received values, in accordance with a predetermined criteria, no be summed with the an least one previously received power control values (col 2 lines 23-67).

Regarding claim 24, Endo teaches a method of controlling the power with which a mobile station transmits signals to a plurality of base stations, comprising the steps of:

transmitting from each of the base stations to the mobile station a power control command having a given value (col 2 lines 23-67);

receiving said power control commands at said mobile station (col 2 lines 23-67);

determining the received values of said received power control commands (col 2 lines 23-67);

combining the received values of said received power control commands; and

controlling the power with which mobile station transmits to the base station based on said combined value (col 2 lines 23-67).

Regarding claim 25, Endo teaches a method as claimed in claim 24, wherein said transmitted power control command signals as generated are each indicative of a

power control having value which comprises either a first value indicating that the power should be increased and a base value indicating that the power should be decreased, and if the combined value exceeds a given threshold, the power with which the mobile station transmits to base station is one of increased or decreased and if the combined value is below the given threshold, the power with which the mobile station transmits to the base station is the other of increased or decreased (col 3 lines 7-62).

Regarding claim 26, Endo teaches a method of controlling the power with which a mobile station transmits signals to a base station, comprising the steps of:

- transmitting from the base station to the mobile station a plurality of power control commands (col 3 lines 7-62);

- receiving said power control commands at said mobile station (col 3 lines 7-62);

- determining the received value of said received power control signals (col 3 lines 7-62);

- determining whether to increase or decrease the power with which the mobile station transmits to the base station based on a currently received power control command signal and at least one received value for at least one previously received power control command signal (col 2 lines 7-62).

Regarding claim 27, Endo teaches a method as claimed in claim 26, comprising the steps of summing the determined value of the currently received power control

Art Unit: 2617

command with a previously determined value of at least one previously received power control command (col 3 lines 7-62);

comparing the summed values with a predetermined threshold (col 3 lines 7-62);

determining whether to increase or decrease controlling the power with which the mobile station transmits to the base station depending on whether or not the threshold is crossed and the determined value of the currently received power control value (col 3 lines 7-62).

Regarding claim 28, Endo teaches a method wherein the mobile station is arranged to transmit signals to a plurality of base stations, each of which base stations is arranged to receive power control commands signals from each of the to said base station, said method further comprising the steps of:

determining the values of each of said received power control values and selecting one of said determined values in accordance with a predetermined criteria as the current received value (col 2 lines 23-67).

Regarding claim 29, Endo teaches a method as claimed in claim 28, wherein said power control command signals as generated are each indicative of a power control command having a given value comprising either a first value indicating that the power should be increased or a base value indicating that the power should be decreased, and wherein the predetermined criteria is to select the received value closer to the base value (col 2 lines 23-67).

Regarding claim 30, Endo teaches a method wherein if the summed value crosses the threshold and the determined value of the received power is determined to represent a power increase, the power with which the mobile station transmits to base station is decreased (col 3 lines 7-62).

Regarding claim 31, Endo teaches a method wherein if the summed value crosses the threshold and the determined value of the received power is determined to be represent a power increase, the power with which the mobile station transmits to base station is decreased and the summed value becomes reset value (col 3 lines 7-62).

Regarding claim 32, Endo teaches a method for controlling the power which a mobile station transmits signals to a base station comprising the steps of:

transmitting from the base station to the mobile station a power control command (col 2 lines 23-67);

receiving said tower control command at the mobile station (col 2 lines 23-67);

determining, using a plurality of different methods, power control information from said received power control command (col 3 lines 7-62); and

controlling the power with which the mobile station transmits to the base station based on the determination step (col 3 lines 7-62).

Art Unit: 2617

Regarding claim 33, Endo teaches a method as claimed in claim 32, wherein the power control information obtained from one of said plurality of different methods is used to control the power with which the mobile station transmits to the base station (col 3 lines 7-62).

Regarding claim 34, Endo teaches a method wherein one of said plurality of different methods comprises the steps of determining from the received power control command a parameter representative of the quality with which the power control command is received at the mobile station, said parameter defining said power control information (col 3 lines 7-62).

Regarding claim 35, Endo teaches a method wherein one of said plurality of different methods comprises the steps of determining the received values of a plurality of power control commands received at said mobile station from a plurality of base stations, combining the received values of the received power control commands to define said power control information (col 3 lines 7-62).

Regarding claim 36, Endo teaches a method wherein one of said plurality of different methods comprises the steps of determining the received values of a plurality of power control commands received at said mobile station from said base station, providing power control information based the currently received power control command and at least one previously received power control command (col 3 lines 7-62).

Regarding claim 37, Endo teaches a mobile station which in use transmits signals to a base station, said mobile station comprising:

means for receiving a power control command transmitted from said base station to said mobile station, said power control command being transmitted with a given value (col 3 lines 7-62);

determining means for determining from said received power control command a parameter representative of the quality with which the power control command is received at the mobile station (col 3 lines 7-62); and

control means for controlling the power which the mobile station transmits signals based on the determination carried out by said determining means (col 3 lines 7-62).

Regarding claim 38, Endo teaches a mobile station which in use transmits signals to a plurality of base stations, said mobile station comprising:

means for receiving power control commands transmitted from said base stations to said mobile station, said power control commands being transmitted with a given values (col 3 lines 7-62);

means for determining the received values of said received power control commands (col 3 lines 7-62);

means for combining the received values of said received power control commands (col 3 lines 7-62); and

means for controlling the power with which mobile station transmits to the

Art Unit: 2617

base station based on said combined value (col 3 lines 7-62).

Regarding claim 39, Endo teaches a mobile station which in use transmits signals to a base station, said mobile station comprising:

means for receiving power control commands transmitted from said base station to said mobile station (col 3 lines 7-62);

means for determining the values of said received power control values (col 3 lines 7-62):

means for controlling the power with which the mobile station transmits to the base station based on a currently received power control command and at least one previously received power control command (col 3 lines 7-62).

Regarding claim 40, Endo teaches a mobile station which is use transmits signals to one or more base stations, the mobile station comprising:

means for receiving power control commands fro the one or more base stations (col 2 lines 23-67).

Regarding claim 41, Endo teaches a method of controlling the power with which a mobile station transmits signals to a base station comprising the steps of:

receiving from the base station at the mobile station a power control command (col 3 lines 7-62);

determining the received value of the received power control command, the received value representing the quality with the which the power control command is received at the mobile station (col 3 lines 7-62); and

deciding whether to increase or decrease the power at which the mobile station transmits signals on the basis of the result of the determination step (col 3 lines 7-62).

Regarding claim 42, Endo teaches a device for a mobile station which in user transmits signals to a base station, the device comprising:

a controller for determining a received value of a power control command received from the base station, the received value representing the quality with which the power control command is received at the mobile station (col 2 lines 23-67); and

deciding whether to increase or decrease the power at which the mobile station transmits signals on the basis of the result of the determination (col 3 lines 7-62).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claim 14**, is rejected under 35 U.S.C. 103(a) as being unpatentable over Endo et al. (US patent 6,808,041).

Regarding claim 14, Endo fails to teach a method as claimed in claim 13, wherein the threshold value is in the range -0.025 and -0.30. However, Examiner takes official notice that a method of claim 13 wherein the threshold value is in the range -0.025 and -0.30 is a design choice. Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching with Endo, in order to enable to control the performance of the system more precisely.

Response to Arguments

5. Applicant's arguments with respect to claims 1-42 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. **Any responses to this action should be mailed to:**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Naghmeh Mehrpour whose telephone number is 571-272-7913. The examiner can normally be reached on 8:00- 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold be reached (571) 272-7905.

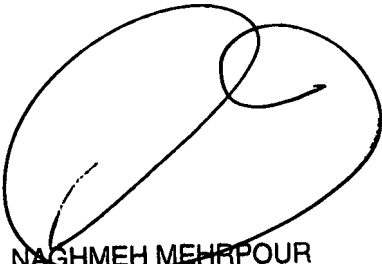
The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NM

May 14, 2007



NAGHMEH MEHRPOUR
PRIMARY EXAMINER